

Appl. No. 10/677,233
Amendment dated: January 27, 2005
Reply to OA of: September 27, 2004

Amendments to the Specification:

On page 1, please replace the first full paragraph with the following amended paragraph.

The invention is ~~related~~ relates to an extendible and flexible heat dissipation air conduit base as a computer heat dissipation device. Especially, the invention is ~~related~~ relates to a heat dissipation air conduit base that has features in practically enabling fast and easy installation in a computer without interfering with internal hardware and being provides a heat dissipation device to provide desirable heat dissipation effect.

Please replace the last two full paragraphs on page 1 with the following amended paragraphs.

Traditionally, the heat dissipation device for computer was made of alumna aluminum or copper into a heat dissipation plate (or heat dissipation paste) to provide a proper heat dissipation effect and prevent the operation of computer components (especially CPU) from being affected by high temperature due to continuously long operation. Practically, such heat dissipation plate had disadvantages like inconvenience in use, disembly removal and replacement. Most seriously, the heat dissipation effect was poor. Presently, very few people are using it.

Therefore, the industry had further improved the traditional heat dissipation plate (or by using heat dissipation paste) by a new type of heat dissipation device, which adopted the major structure of traditional heat dissipation plate and put with a fan on top of the heat dissipation plate. Through the combinational combined effect from fan and heat dissipation plate, the previously poor heat dissipation efficiency was improved and CPU received better heat dissipation than before.

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On page 2, please replace the first and second full paragraphs with the following amended paragraphs.

The heat dissipation device combining fan and heat dissipation plate provided better heat dissipation effect than the traditional device. However, because ~~computer continues~~ computers continue to provide new and powerful functions with increasingly precision components and modules, the heat generation from continuous operation also continues to increase. Especially for solving internal temperature problem and complying with internal heat flow field ~~direction~~, it is apparent that current heat dissipation device fails to achieve effective heat dissipation. Under long term of use, it is hard to avoid instability for computer system due to poor heat dissipation for CPU or computer main unit. As a result, the user is irritated by this problem. Therefore, how to provide the computer with a fixed heat dissipation channel and effective heat dissipation is an urgent subject for ~~present~~ the industry.

The inventor for the present invention aimed at the structural design in previous heat dissipation device that had problem with internal field and heat dissipation plate direction. The inventor also looked into the problem with internal temperature rise causing poor heat dissipation and was actively engaged in improving heat dissipation mechanism. After a long time ~~of efforts and effort~~, the present invention was created.

Please replace the last full paragraph on page 2 which bridges page 3 with the following amended paragraph.

The main objective for the present invention is to provide an extendible and flexible heat dissipation air conduit base as a heat dissipation channel in computer heat dissipation device. On one hand, it releases hot air through air conduit or introduces cold air from outside, so the problem with random internal flow field can be solved. On the other hand, it effectively lowers the internal temperature to increase the overall heat dissipation effect.

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On page 3, please replace the first full paragraph with the following amended paragraph.

Another object of objective for the present invention is to provide an extendible and flexible heat dissipation air conduit base in computer heat dissipation device, in which the air conduit fixture is made of alumna aluminum to be capable of absorbing internal heat and facilitate lowering internal temperature.

Please replace the third full paragraph with the following amended paragraph.

To attain the above-mentioned objectives, the approach adopted in the present invention is to equip the heat dissipation air conduit base with air conduit and fixture. The air conduit is a hollow and flexible duct. At both ends of the air conduit, there is a fixture available to connect with different sizes of size fans. Each fixture ~~is in~~ has a rectangular shape and has a circular hole for connection with air conduit. There are several positioning holes with different diameters arranged in a circle available for connection with different sizes of CPU fans. Secured connection is made by passing screws through positioning holes or through holes. The fixture of the other end is used to connect with heat dissipation fan on computer case. In this way, a desirable air suction or discharge is achieved for effective heat dissipation for CPU operation. Since the air conduit is freely bendable so it can get around the components and modules in computer during installation. Besides, the fixture has through holes in the middle section at four perimeters to facilitate reversed U metal wire to pass through from rear edge of air conduit, so air conduit and fixtures are tightly connected.

On page 4, please replace the last full paragraph which bridges page 5 with the following amended paragraph.

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The present invention is to provide an extendible and flexible heat dissipation air conduit base in computer heat dissipation device. Please refer to Fig. 1 and Fig. 2. The air conduit base 1 comprises a flexible and hollow air conduit 10 and fixtures 11 at both ends for positioning and connection. ~~On fixture~~ Fixtures 11 are in have a rectangular shape and have a circular hole 111 in the center for connection with the air conduit 10. At each corner, there are positioning holes 112 for locking screws to pass through to facilitate installation on the heat dissipation fan 4 on computer case 3. The other fixture 111 is also rectangular and has a circular hole 111 in the center. At each corner, there are two sets of positioning holes 112 in ~~irradiating~~ radiating form. Each set of positioning holes 112 fit different size of CPU fan 2 and provides installation flexibility. Through this, the fixture 11 [[is]] firmly connects with CPU fan 2 to provide effective heat dissipation. In the design of the air conduit 10 and the fixtures 11, there are through holes 113 in the middle section of four perimeters of the fixture 11 for the reversed U metal wire 114 to pass to the rear edge of the air conduit 10 and then go back to the through hole 113 of the fixture 11. Thus, positioning is achieved as in Fig. 3.

On page 5, please replace the last full paragraph which bridges page 6 with the following amended paragraph.

The above CPU fan 2 and the heat dissipation fan 4 on computer case 3 can adopt “air discharge” type at the same time. The heat generated by CPU is discharged through the air conduit 10 out of computer case 3. They can also adopt “air suction” type that sucks in cold air outside the computer case 3 to reduce the heat due to CPU operation. The air conduit 10 is made of alumna aluminum, which absorbs internal heat of computer case 3 and facilitates lowering internal temperature of computer case 3.